

**REMARKS**

In response to the Office Action dated April 5, 2004, Applicants respectfully request reconsideration and withdrawal of the rejection of the claims.

Claims 1-8 were rejected under 35 U.S.C. §103, on the grounds that they were considered to be unpatentable over the Allen et al. patent (U.S. 4,739,176). The rejected claims are directed to a device for detecting foreign substances in a thread by means of a detector that scans the thread. The claimed device includes an illumination element that provides intensive illumination of a thread moving in a longitudinal direction. The illumination element has a cavity with a surface that is directed towards the thread, and openings disposed in this surface for light sources. As further recited in dependent claims 2 and 4, the cavity has a symmetrical spherical shape, and more preferably a hemispherical shape. As recited in claim 5, the axes of the openings for the light sources extend through the center of the cavity.

In rejecting the claims, the Office Action acknowledges that the Allen patent does not disclose a cavity adjacent to the thread, with openings for light sources. Despite this acknowledged difference, the Office Action fails to provide any teaching that would lead a person of ordinary skill in the art to modify the structure of the Allen patent to arrive at the claimed subject matter. For at least this reason, therefore, the rejection fails to establish a *prima facie* case of obviousness.

Furthermore, with reference to Figures 2 and 4, the Office Action states that the Allen patent discloses that the light source is located in a spherical design above the thread 10. Applicant is unable to determine the basis for this statement. Referring to Figure 3, it can be seen that the light sources 50 and 51 are disposed on opposite sides of a semi-opaque ceramic insert 44, through which the thread 10

passes. There is no disclosure of a spherical cavity having openings for the light sources. In Figure 4, it can be seen that the two light sources 52 and 53 are disposed at an angle with respect to the thread, and illuminate it through an optical filter 58 and a diffuser 60. Again, there is no disclosure of a hemispherical cavity with openings for these light sources.

For this additional reason, therefore, it is respectfully submitted that the Allen patent does not suggest the claimed subject matter.

Original claims 1-8 have been canceled in favor of new claims 9-15, to place the claims in a more conventional format and thereby clarify the scope of the subject matter being claimed, as well as further illustrate the differences between the claimed invention and the prior art. Reconsideration and withdrawal of the rejection, and allowance of all pending claims are respectfully requested.

Respectfully submitted,

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